

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A MOS transistor formed in a single-crystal silicon substrate comprising:

~~an active area surrounded by an~~ insulating wall surrounding an upper portion of the single-crystal silicon substrate;

a first conductive strip ~~covering above~~ a central strip of the ~~active area~~upper portion;

a second conductive strip ~~placed in the active area~~upper portion right below the first conductive strip; and

conductive regions placed in two recesses of the insulating wall and placed against ends of the first and second conductive strips, wherein, the first conductive strip, the second conductive strip and the conductive regions form a gate, and the silicon surfaces of the active area~~single-crystal substrate opposite to the conductive strips and conductive regions~~abutting the gate are covered with an insulator forming a gate oxide.

2. (Original) The transistor of claim 1 wherein the first and second conductive strips are made of polysilicon and the insulating wall is made of silicon oxide.

3. (Currently Amended) The transistor of claim 1 ~~with two conductive strips, wherein~~wherein, the first conductive strip and the second conductive strip are parallel to each other and are defined by a first end and a second end along a length thereof, a first conductive region is in contact with the first end, and a second conductive region is in contact with the second end. the conductive regions placed against the first and second strips are separate.

4-8. (Canceled)

9. (Original) The MOS transistor of claim 1 wherein the second conductive strip is one of a plurality of second conductive strips, said second conductive strips together with said first conductive strips forming a stack.

10. (Original) The MOS transistor of claim 9 wherein the number of second conductive strips is 1, 2 or 3.

11. (Currently Amended) The MOS transistor of claim 10 wherein each said conductive strip of said stack is separated from one another by a single-crystal silicon layer.

12. (Currently Amended) A MOS transistor formed in a single-crystal silicon substrate comprising:

an active area in the single-crystal silicon substrate surrounded by an insulating wall;

first conductive strip covering a central strip of the active area and forming first gate;

a first insulating layer immediately below said first conductive strip;

a second conductive strip placed in the active area below said first insulating layer and separated therefrom by a single-crystal silicon layer that is a part of the single-crystal silicon substrate; and

conductive regions below first insulating layer, said conductive regions being placed in two recesses of the insulating wall and against ends of the second conductive strips and said single-crystal silicon layer, said conductive regions and said second conductive strip forming second gate, wherein, ~~the~~ silicon surfaces of said active area ~~facing~~ abutting said second conductive strip and conductive regions are covered with a second insulating layer.

13. (Previously Presented) The MOS transistor of claim 11 wherein said first conductive strip is made of polysilicon.

14. (Previously Presented) The MOS transistor of claim 11 wherein said first conductive strip is made of aluminum.

15. (Previously Presented) The MOS transistor of claim 11 wherein said second conductive strip and said conductive regions are made of polysilicon.

16. (Previously Presented) The MOS transistor of claim 11 wherein said first and second insulating layers are silicon oxide.

17. (Previously Presented) The MOS transistor of claim 12 wherein the second conductive strip is one of a plurality of second conductive strips, said second conductive strips together with said first conductive strips forming a stack.

18. (Previously Presented) The MOS transistor of claim 17 wherein the number of the plurality of second conductive strips is 2 or 3.

19. (Currently Amended) The MOS transistor of claim 10 wherein each said conductive strip of said stack is separated from one another by a single-crystal silicon layer.

20. (Currently Amended) A MOS transistor comprising:
a single-crystal silicon substrate having an active area surrounded by insulating walls protruding from a surface of the substrate;

a stack of a plurality of layer pairs formed in the active area, each layer pair including a conductive layer and a ~~single~~single-crystal silicon layer, the conductive layers alternating with the ~~single~~single-crystal silicon layers, the single-crystal silicon layers being parts of the single-crystal silicon substrate;

an insulating layer overlying the stack;
a first gate overlying the insulating layer; and
a second gate comprising a first conductive region, a second conductive region and the plurality of the conductive layers of the stack, said first and second conductive regions ~~respectively being against~~ abutting two opposing sides of the stack respectively.

21. (Previously Presented) The MOS transistor of claim 20 wherein the stack comprising three layer pairs of alternating conductive layers and single crystal silicon layers.

22. (Previously Presented) The MOS transistor of claim 20 wherein the first gate is a polysilicon layer.

23. (Previously Presented) The MOS transistor of claim 20 wherein the first gate is an aluminum layer.

24. (Previously Presented) The MOS transistor of claim 20 wherein the second gate is made of polysilicon.